

Mississippi State Health Plan FY 2006

Executive Summary

Legal Authority and Purpose

Section 41-7-171 et seq., Mississippi Code 1972 Annotated, as amended, establishes the Mississippi Department of Health (MDH) as the sole and official agency to administer and supervise all health planning responsibilities for the state, including development and publication of the *Mississippi State Health Plan*. The *State Health Plan*:

- Identifies priority health care needs in Mississippi,
- Recommends ways in which those needs may be met, and
- Establishes criteria and standards for health-related activities which require Certificate of Need review.

The effective dates of the *Fiscal Year 2006 Mississippi State Health Plan* extend from August 29, 2005, through June 30, 2006, or until superseded by a later *Plan*.

Outline of the State Health Plan

The *Plan* is divided into sections:

Section A

- Description of Mississippi's demographic characteristics
- Identification of health status indicators based on vital statistics
- Summary of major health care resources
- Identification of priority health needs
- Establishment of policies and strategies to help meet identified needs
- Examination of health care professionals shortage

Section B

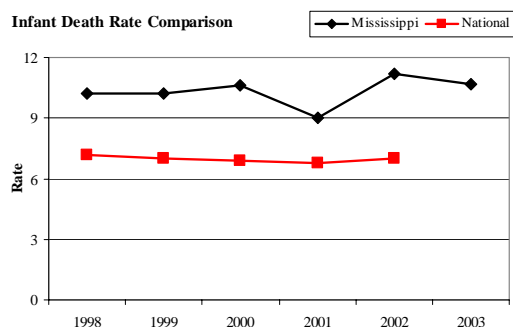
- Description of existing services
- Evaluation of the need for additional services
- Description of Certificate of Need criteria and standards

Demographic Profile

Mississippi had 2,881,283 people dispersed in 82 counties and 296 incorporated cities, towns, and villages. While 50.3 percent of the people live in one of the incorporated municipalities, 51.2 percent live in areas classified as rural by the Census Bureau. Nineteen percent of the people live in a city with a population of 25,000 or more, and only 34.9 percent in a city of 10,000 or more. The 2000 Census reported 1,161,953 housing units in Mississippi and an average occupancy of 2.45 persons per unit. Employment increased from 1,229,000 in 2003 to 1,248,100 in 2004 (annual average), a 1.6 percent increase. This figure includes all Mississippi residents who are employed, whether the employment is within Mississippi or out-of-state. Mississippi ranked 49th among the states in per capita income and 48th in median family income. High school graduation rates in Mississippi rose to 74.3 percent in 2000, from 64.3 percent in 1990, a gain of ten points. Although there has been marked improvement in income, education, and housing, Mississippi remains well below the national average in these areas.

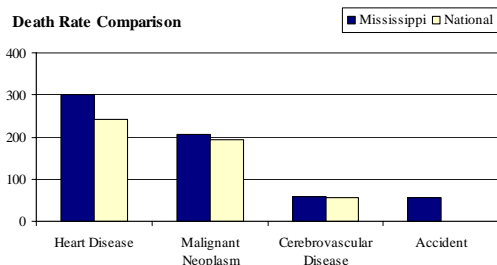
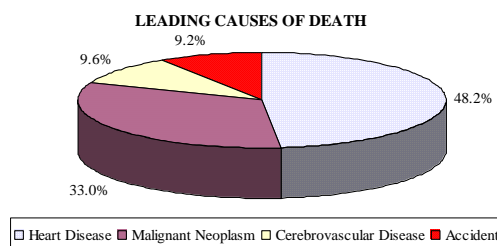
Health Status

Live Births: In 2003, live births numbered 42,321, compared to 41,511 registered in 2002. A physician attended 97.8 percent of all in-hospital births (41,377). Nurse midwives delivered 774 live births. A total of 594 congenital malformations were reported in 2003 for a rate of 14.04 per 1,000 live births. Mississippi experienced 417 fetal, seven maternal, and 453 infant deaths in 2003. The infant mortality rate in Mississippi has declined since 1980; from 17.0 per 1,000 live births in 1980 to 10.7 per 1,000 live births in 2003.



Rate = Infant deaths per 1,000 live births
National rates from Center for Disease Control & Prevention (rate for 2003 not available)

Deaths: There were 28,333 deaths reported in 2003, with cardiovascular diseases, principally heart disease and stroke, being the leading cause, accounting for 30.6 percent of deaths, followed closely by malignant neoplasm, accounting for 20.9 percent.



Rate per 100,000 population
National accident rate not available

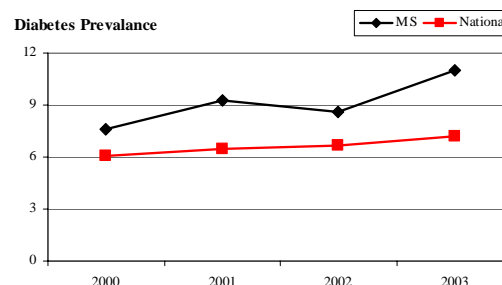
Obesity: Mississippi has had the highest rates of adult overweight and obesity in the nation. Overweight and obesity are one of the state's most important and pressing public health problems. The high and increasing rate of diabetes in the state is largely a consequence of the increasing rate of obesity.

Hypertension: Hypertension (high blood pressure) is a major risk factor for coronary heart disease (CHD) and heart failure, and it is the single most important risk factor for stroke. The high (and rising) prevalence of hypertension is a reason for the high CHD and stroke mortality rates in the state. Mississippi is one of 11 states in the southeast U.S. known as the "Stroke Belt".

Diabetes: The 2003 prevalence of diabetes in Mississippi was 11.0 percent, the highest in the nation. Diabetes is the primary cause of macrovascular disease, stroke, adult blindness, end-stage renal disease, and non-traumatic lower extremity amputations. Diabetes is also an important risk factor for coronary heart disease, stroke, and various complications of pregnancy. The 2003 diabetes prevalence rate exceeded the 2002 prevalence rate by 28 percent. Authorities estimate that adult onset diabetes is under-reported by 40 percent.

2003 Diabetes Prevalence

Diabetes prevalence increased slightly from 2002 to 2003 with Mississippi at a rate of 11.0 percent compared to a National rate of 7.2 percent.



Behavioral Risk Factor Surveillance System

	Mississippi	National
Diabetes Prevalence	11.0%	7.2%

Behavioral Risk Factor Surveillance System

Cancer: Each year, more than 15,000 Mississippians are diagnosed with cancer. In order of frequency, the top five sites of cancer diagnosis were lung, breast, prostate, colorectal, and bladder. Cancer caused 5,924 deaths to Mississippians during 2004.

Lung cancer is the most common cause of cancer death.

Cancer, the second leading cause of death among Americans, is responsible for one of every four deaths in the United States. In 2005, more than 570,000 Americans—or more than 1,500 people a day—will die of cancer. Close to 1.4 million new cases will be diagnosed in 2005. This estimate does not include preinvasive cancer or the more than 1 million cases of nonmelanoma skin cancer expected to be diagnosed this year.¹

The number of new cancer cases can be reduced substantially, and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving optimal weight, improving nutrition, and avoiding sun exposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible to all Americans is also essential for reducing the high rates of cancer and cancer deaths.¹

¹Center for Disease Control and Prevention website

Tuberculosis: Mississippi reported 119 new cases of tuberculosis in 2004 or a rate of 4.2 cases per 100,000 population; this compares with the national rate of 5.1 cases per 100,000 population.

Sexually Transmitted Diseases: Sexually transmitted diseases remain a public health problem in Mississippi. A total of 57 cases of early syphilis were reported, or a rate of 1.98 new cases per 100,000 population. This compares with a national rate of 2.5. The state had 7,162 cases of gonorrhea, 18,863 chlamydia infections, and 607 new cases of AIDS reported in 2004.

Hepatitis: Mississippi reported 20 cases of hepatitis A, 107 cases of hepatitis B, and 33 cases of hepatitis C in 2004 for a rate of 0.7, 3.72, and 1.15 for hepatitis A, B, and C, respectively. CDC reported national rates at 2.6, 2.6, and 0.4, respectively.

Occupational Injuries and Illnesses: Eighty-six occupational related fatalities and 13,413 work-related injuries or illnesses were reported in 2004.

Health Care Resources

Health Professionals: The following table details the count of health professionals during 2005.

Health Professionals by Type (2004)

Health Profession	Number
Physicians*	5,305
Dentists*	1,197
Chiropractors	257
Optometrists	287
Pharmacists	2,659
Registered Nurses	34,724
Nurse Practitioners	1,562
Licensed Practical Nurses	12,424
Nursing Assistants / Aides	16,654
Physicians' Assistants	53
Physical Therapy Practitioners	1,365
Occupational Therapists	663
Social Workers	4,012

*Active

Long Term Care: Mississippi has 185 public or proprietary skilled nursing homes, with a total of 17,084 licensed beds; 19 entities have received CON approval for the construction of 891 additional beds; and ten facilities have voluntarily delicensed a total of 321 nursing home beds, which are being held in abeyance by MDH. This count excludes eight facilities that operate 1,487 beds not subject to Certificate of Need review and serve a specific population. The *Plan* indicates a need for 9,573 additional skilled nursing beds.

The state has 13 intermediate care facilities for the mentally retarded with a total of 2,709 beds. The state also has six psychiatric residential treatment facilities for emotionally disturbed children and adolescents, with a total of 268 licensed

beds. (An additional 120 beds have received CON approval). The *Plan* indicates that the state is presently over-bedded by 43 mentally retarded/developmental disabled long-term care and 89 psychiatric residential treatment beds.

The state has 181 licensed personal care homes, with 4,700 beds; various retirement or senior housing facilities that provide apartments for independent living; and several continuing care retirement communities that provide continuum of care to the elderly. Fifty-three Mississippi hospitals have designated 724 beds as swing-beds, which provided 73,840 inpatient days of long-term skilled nursing care to 5,828 persons. Fourteen hospitals operated a total of 206 beds as a “distinct-part skilled nursing facility.” Nine freestanding Medicare-approved hospitals provide long-term acute care services to patients who do not require more than three hours of rehabilitation per day.

Acute Care Hospitals: Mississippi had 96 non-federal acute (short term) care hospitals, with a total of 11,334 licensed medical-surgical beds, of which 10,374 were set-up and staffed. The count excludes hospitals operated by the state and federal agencies that serve a unique population. Twenty-one of the 96 hospitals have been designated as Critical Access Hospitals, providing outpatient, emergency, and limited inpatient services only. The average daily census of Mississippi hospitals was 5,008. Fifty-four of the state's hospitals reported occupancy rates of less than 40 percent during FY 2004. Mississippi is over-bedded, with an average of 6,326 licensed beds remaining vacant on any given day.

Acute Care Hospital Data (2004)

	Number
Non-Federal Acute Care Hospitals	96
Licensed Medical-Surgical Beds	11,334
Medical-Surgical Beds Setup	10,374
Critical Access Hospitals	21 *
Average Daily Census	5,008

*Included in 96 acute care hospitals

Diagnostic Imaging Services: The following table details the number of diagnostic imaging procedures performed by providers during 2004.

Diagnostic Imaging Procedures by Type (2004)

Diagnostic Imaging Service	Procedures
Magnetic Resonance Imaging	224,005
Digital Subtraction Angiography	41,562
Computer Assisted Tomography	299,779
Positron Emission Tomography	5,168

Acute Care Services: Radiation Therapy uses ionizing radiation to treat diseases, primarily cancer. Brachytherapy radiation implantation was performed on 1,511 patients in 17 hospitals; the state's only GammaKnife® reported 108 external beam radiation therapy procedures; and 21 cancer treatment centers performed 139,052 megavoltage therapeutic procedures during 2004.

Acute Care Services: Extracorporeal Shock Wave Lithotripsy (ESWL). The lithotripter is a medical device which disintegrates kidney or biliary stones (gallstones) by using shock waves. Twenty-nine Mississippi hospitals and two free-standing facilities provided 3,857 renal ESWL procedures during FY 2004.

Acute Care Services: Cardiac Catheterization. Cardiac catheterization, predominately a diagnostic tool that is an integral part of cardiac evaluation, brings together two disciplines: cardiac catheterization (the evaluation of cardiac function) and angiography (X-ray demonstration of cardiac anatomy). Cardiac catheterization includes various therapeutic interventions. In FY 2004, the state's 52 cardiac catheterization laboratories performed 44,139 adult and 443 pediatric cardiac catheterizations. Providers performed a total of 9,366 percutaneous transluminal coronary angioplasties to improve myocardial blood flow.

Acute Care Services: Open Heart Surgery. Open-heart surgery involves a number of procedures, including valve replacement, repair of cardiac defects, coronary bypass, heart transplantation, and artificial heart implantation. Providers performed a total of 44,139 such surgeries during 2004.

Acute Care Services: Perinatal Care. Four Mississippi hospitals reported more than 2,000 obstetrical deliveries each in FY 2004, accounting for 25.8 percent of the state's total hospital deliveries.

Acute Care Services: Outpatient Services. Hospitals received 1,667,207 emergency room visits and 2,486,071 clinic visits for a total of 4,153,278 outpatient visits during 2004.

Acute Care Services: Ambulatory Surgery. Fifty-four percent of the 264,870 surgeries performed in hospitals (142,816) were outpatient surgeries. The state's 24 freestanding ambulatory surgery centers performed an additional 96,752 surgeries during 2004.

Mental Health Services: The public mental health system, including regional community mental health centers and the community service divisions of the state psychiatric hospitals provided services to a total of 59,769 adults and 26,740 adolescents and children. Mississippi's four state-operated mental hospitals, which provide the majority of inpatient psychiatric care, operated 1,869 beds and admitted 2,945 adult patients during 2004. Mississippi has 12 hospital-based and two freestanding non-state operated adult psychiatric facilities, with a capacity of 504 licensed beds for adult psychiatric patients.

Three freestanding facilities and five hospital-based facilities, with a total of 206 licensed beds, provide acute psychiatric inpatient services for children and adolescents. Additionally, the Department of Mental Health operates a separately-licensed 60-bed facility at Mississippi State

Hospital to provide short-term inpatient psychiatric treatment for children and adolescents. East Mississippi State Hospital operates a 50-bed psychiatric and chemical dependency treatment unit for adolescent males.

Rehabilitative Services: Comprehensive medical rehabilitation (CMR) services are intensive care providing a coordinated multidisciplinary approach to patients with severe physical disabilities that require an organized program of integrated services. Level I facilities offer a full range of CMR services to treat disabilities such as spinal cord injury, brain injury, stroke, congenital deformity, amputations, major multiple trauma, polyarthritis, fractures of the femur, and neurological disorders, including multiple sclerosis, cerebral palsy, muscular dystrophy, Parkinson's Disease, and others. Level II facilities offer CMR services to treat disabilities other than spinal cord injury, congenital deformity, and brain injury. Seven hospital-based Level I facilities offered CMR services to 4,488 patients and eight hospital-based Level II facilities offer limited CMR services to 2,048 additional patients.

Home Health Care: The 66 home health agencies licensed to provide services to certain home-bound patients provided 2,271,976 home health visits to 59,769 Mississippians during the year. The breakdown of visits by the Department of Health, the hospital based, and freestanding home health agencies are as follows:

Home Health Patients & Visits by Agency (2004)

Home Health Agencies	Patients Served	Home Health Visits
Department of Health	1,866	99,611
Hospital-Based	15,080	576,691
Freestanding	42,774	1,595,674
Total	59,720 *	2,271,976

*Non-duplicate count

Home health providers performed a total of 2,360,218 visits to 55,660 patients during 2001.

End Stage Renal Disease: End Stage Renal Disease (ESRD) describes the loss of kidney function from chronic renal failure to the extent that the remaining kidney function will no longer sustain life. Treatment generally consists of either transplantation or dialysis consisting of peritoneal dialysis or hemodialysis. Kidney transplantation is the treatment of choice for most patients with end stage renal failure. The University of Mississippi Medical Center has the only transplant program in the state and performed 26 cadaver transplants during the calendar year 2004. Mississippi had 68 ESRD facilities which collectively housed 1,448 hemodialysis stations providing maintenance dialysis services to 4,886 patients during 2004. The number of Mississippi dialysis patients has increased from 4,636 in 2002 to 4,775 in 2003.

Statutory and Policy Changes

Statutory provisions contained in Mississippi Code 41-7-191, Subsection 13, which exempts continuing care retirement centers from CON review if applicants meet certain conditions, were repealed effective July 1, 2005 because of an included repeal provision.

The State Board of Health, on July 13, 2005, modified its policy governing Magnetic Resonance Imaging (MRI) procedures estimation methodology to require that projected procedures (submitted by referring physician affidavit) be based on actual MRI procedures referred during the past year.